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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,844	04/05/2000	Toshitsugo Ono	P00,0251	6442

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07/29/2002

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 07/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it contains more than one paragraph due to the inclusion of formulas 1 and 2.

Claim Rejections – 35 USC 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5 and 8-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claim 5, the phrase, "pencil hardness" lacks antecedent basis.

- b. In claim 5, the term, H is indefinite because it is not defined.

- c. In claim 8, the phrase "on light transmitting layer" is indefinite. Examiner suggests the claim language be changed to "on *said* light transmitting layer".

d. In claim 17, the phrase, In, Sn and Sn is indefinite. Applicant claims the same metal element twice.

Claim Rejections – 35 USC § 103(a)

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9, 11, 14-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being obvious over Kondo et al. (U.S. 5,536,425).

7. Konda teaches recording mediums which comprise non-magnetic support and a layer formed on the support on the surface having a coefficient of friction (column 1, lines 16-22), Konda discloses perfluoropolyether derivatives for recording mediums (column 1, lines 62-64). Konda discloses the formula $R-COO-R1-N+R2R3R4$ where R, R2, R3 and R4 represents H or a hydrocarbon group having from 6 to 22 carbon atoms (column 2, lines 8-17). Konda discloses a top coat layer (column 2, line 58). Konda discloses non-magnetic supports including ceramic and glass substrates (column 8, lines 35-41) which constitutes a light transmitting layer that can be illuminated by light along with resin binders (column 8, lines 51-59) including organic materials. Konda discloses a non-magnetic support made by sputtering (column 9, lines 9-10) with a coat layer formed on the support (column 9, lines 14-15). Konda discloses a coefficient of friction measurement (column 11, lines 55-56). Although Konda does not disclose the precise

thicknesses, thickness variation, hardness, surface resistance, dynamic frictional coefficient, surface tension or moisture absorption, it would have been obvious to one of ordinary skill in the art to optimize the components since discovering the optimum or workable ranges involves only routine skill in the art.

Claim Rejections – 35 USC § 103(a)

8. Claims 10, 12-13, 17 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Kondo et al. (U.S. 5,536,425) in view of Akutsu (U.S. 5,864,357).

9. Konda is relied upon for claims 1-9, 11, 14-16 and 18-19. Konda does not disclose inorganic material made of SiO_x , said surface layer formed of an electrically conductive material consisting of indium oxide or tin oxide or In or Sn.

Akutsu teaches a light transmitting electrically conductive layer (column 2, lines 49-50) consisting of SnO_2 , In_2O_3 (column 4, lines 47-49) and silicon nitride and silicon carbide (column 5, lines 59-60). Akutsu teaches using a spray coating method (column 4, line 52). Akutsu teaches recording material (column 7, line 21).

Konda and Akutsu are analogous art because they are from the same field of recording media. It would have been obvious to one of ordinary skill in the art to include the light transmitting electrically conductive layer consisting of SnO_2 , In_2O_3 , silicon nitride and silicon carbide in the recording medium of Konda because Akutsu teaches that these components are used to increase the resistivity and hardness of the recording medium.

Art Unit: 1774

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5408 for regular communications and (703) 305-3599 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
November 14, 2001